

Psychologists

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Significant Points

- More than 1 out of 4 psychologists are self-employed, nearly four times the average for professional workers.
- Most specialists, including clinical and counseling psychologists, need a doctoral degree; school and industrial-organizational psychologists need a master's degree.
- Opportunities in psychology are limited for those with only a bachelor's degree.

Nature of the Work

Psychologists study the human mind and human behavior. Research psychologists investigate the physical, cognitive, emotional, or social aspects of human behavior. Psychologists in health service provider fields provide mental health care in hospitals, clinics, schools, or private settings. Psychologists employed in applied settings such as business, industry, government or non-profits provide training, conduct research, design systems, and act as advocates for psychology.

Like other social scientists, psychologists formulate hypotheses and collect data to test their validity. Research methods vary depending on the topic under study. Psychologists sometimes gather information through controlled laboratory experiments or by administering personality, performance, aptitude, and intelligence tests. Other methods include observation, interviews, questionnaires, clinical studies, and surveys.

Psychologists apply their knowledge to a wide range of endeavors, including health and human services, management, education, law, and sports. In addition to working in a variety of settings, psychologists usually specialize in one of a number of different areas.

Clinical psychologists—who constitute the largest specialty—most often work in counseling centers, independent or group practices, hospitals, or clinics. They help mentally and emotionally disturbed clients adjust to life and may help medical and surgical patients deal with illnesses or injuries. Some clinical psychologists work in physical rehabilitation settings, treating patients with spinal cord injuries, chronic pain or illness, stroke, arthritis, and neurological conditions. Others help people deal with times of personal crisis, such as divorce or the death of a loved one.

Clinical psychologists often interview patients and give diagnostic tests. They may provide individual, family, or group psychotherapy, and design and implement behavior modification programs. Some clinical psychologists collaborate with physicians and other specialists to develop and implement treatment and intervention programs that patients can understand and comply with. Other clinical psychologists work in universities and medical schools, where they train graduate students in the delivery of mental health and behavioral medicine services. Some administer community mental health programs.

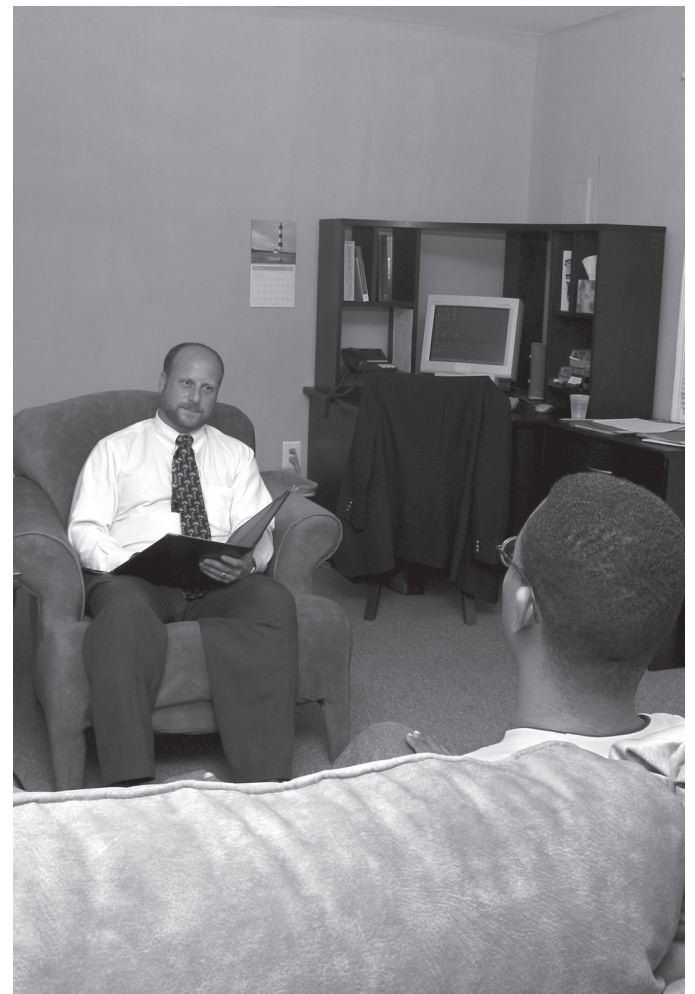
Areas of specialization within clinical psychology include health psychology, neuropsychology, and geropsychology. *Health psychologists* promote good health through health maintenance counseling programs designed to help people achieve goals, such as to stop smoking or lose weight. *Neuropsychologists* study the relation between the brain and behavior. They often

work in stroke and head injury programs. *Geropsychologists* deal with the special problems faced by the elderly. The emergence and growth of these specialties reflects the increasing participation of psychologists in providing direct services to special patient populations.

Often, clinical psychologists will consult with other medical personnel regarding the best treatment for patients, especially treatment that includes medications. Clinical psychologists generally are not permitted to prescribe medications to treat patients; only psychiatrists and other medical doctors may prescribe medications. (See the statement on physicians and surgeons elsewhere in the *Handbook*.) However, one State, New Mexico, has passed legislation allowing clinical psychologists who undergo additional training to prescribe medication, and similar proposals have been made in additional States.

Counseling psychologists use various techniques, including interviewing and testing, to advise people on how to deal with problems of everyday living. They work in settings such as university counseling centers, hospitals, and individual or group practices. (Also see the statements on counselors and social workers elsewhere in the *Handbook*.)

School psychologists work in elementary and secondary schools or school district offices to resolve students' learning and behavior problems. They collaborate with teachers, parents, and school personnel to improve classroom management strategies or parenting skills, counter substance abuse, work



Because psychologists interact with people daily, they must possess good communication and interpersonal skills.

with students with disabilities or gifted and talented students, and improve teaching and learning strategies. They may evaluate the effectiveness of academic programs, behavior management procedures, and other services provided in the school setting.

Industrial-organizational psychologists apply psychological principles and research methods to the workplace in the interest of improving productivity and the quality of worklife. They also are involved in research on management and marketing problems. They conduct applicant screening, training and development, counseling, and organizational development and analysis. An industrial psychologist might work with management to reorganize the work setting to improve productivity or quality of life in the workplace. They frequently act as consultants, brought in by management in order to solve a particular problem.

Developmental psychologists study the physiological, cognitive, and social development that takes place throughout life. Some specialize in behavior during infancy, childhood, and adolescence, or changes that occur during maturity or old age. They also may study developmental disabilities and their effects. Increasingly, research is developing ways to help elderly people remain independent as long as possible.

Social psychologists examine people's interactions with others and with the social environment. They work in organizational consultation, marketing research, systems design, or other applied psychology fields. Prominent areas of study include group behavior, leadership, attitudes, and perception.

Experimental or research psychologists work in university and private research centers and in business, nonprofit, and governmental organizations. They study behavior processes using human beings and animals, such as rats, monkeys, and pigeons. Prominent areas of study in experimental research include motivation, thought, attention, learning and memory, sensory and perceptual processes, effects of substance abuse, and genetic and neurological factors affecting behavior.

Working Conditions

A psychologist's subfield and place of employment determine working conditions. Clinical, school, and counseling psychologists in private practice have their own offices and set their own hours. However, they often offer evening and weekend hours to accommodate their clients. Those employed in hospitals, nursing homes, and other health facilities may work shifts including evenings and weekends, while those who work in schools and clinics generally work regular hours.

Psychologists employed as faculty by colleges and universities divide their time between teaching and research and also may have administrative responsibilities. Many have part-time consulting practices. Most psychologists in government and industry have structured schedules.

Increasingly, many psychologists work as part of a team and consult with other psychologists and professionals. Many experience pressures due to deadlines, tight schedules, and overtime work. Their routine may be interrupted frequently. Travel usually is required, in order to attend conferences or conduct research.

Employment

Psychologists held about 139,000 jobs in 2002. Educational institutions employed about 3 out of 10 salaried psychologists in positions other than teaching, such as counseling, testing, research, and administration. Three out of 10 were employed in

health care, primarily in offices of mental health practitioners and in outpatient care facilities, private hospitals, nursing and residential care facilities, and individual and family service organizations. Government agencies at the State and local levels employed 1 in 10 psychologists, primarily in public hospitals, clinics, correctional facilities, and other settings. Some psychologists work in, research organizations, management consulting firms, marketing research firms, religious organizations, and other businesses.

After several years of experience, some psychologists—usually those with doctoral degrees—enter private practice or set up private research or consulting firms. More than 1 out of 4 psychologists were self-employed.

In addition to the jobs described above, many psychologists held faculty positions at colleges and universities, and as high school psychology teachers. (See the statements on teachers—postsecondary and teachers—preschool, kindergarten, elementary, middle, and secondary elsewhere in the *Handbook*.)

Training, Other Qualifications, and Advancement

A doctoral degree usually is required for employment as an independent licensed clinical or counseling psychologist. Psychologists with a Ph.D. qualify for a wide range of teaching, research, clinical, and counseling positions in universities, healthcare services, elementary and secondary schools, private industry, and government. Psychologists with a Doctor of Psychology (Psy.D.) degree usually work in clinical positions or in private practices.

A doctoral degree usually requires 5 to 7 years of graduate study. The Ph.D. degree culminates in a dissertation based on original research. Courses in quantitative research methods, which include the use of computer-based analysis, are an integral part of graduate study and are necessary to complete the dissertation. The Psy.D. may be based on practical work and examinations rather than a dissertation. In clinical or counseling psychology, the requirements for the doctoral degree usually include at least a 1-year internship.

Persons with a master's degree in psychology may work as industrial-organizational psychologists or school psychologists. They also may work as psychological assistants, under the supervision of doctoral-level psychologists, and conduct research or psychological evaluations. A master's degree in psychology requires at least 2 years of full-time graduate study. Requirements usually include practical experience in an applied setting and a master's thesis based on an original research project. Competition for admission to graduate programs is keen. Some universities require applicants to have an undergraduate major in psychology. Others prefer only coursework in basic psychology with courses in the biological, physical, and social sciences; and statistics and mathematics.

A bachelor's degree in psychology qualifies a person to assist psychologists and other professionals in community mental health centers, vocational rehabilitation offices, and correctional programs. They may work as research or administrative assistants or become sales or management trainees in business. Some work as technicians in related fields, such as marketing research.

In the Federal Government, candidates having at least 24 semester hours in psychology and one course in statistics qualify for entry-level positions. However, competition for these jobs is keen because this is one of the few areas in which one can work as a psychologist without an advanced degree.

The American Psychological Association (APA) presently accredits doctoral training programs in clinical, counseling, and

school psychology. The National Council for Accreditation of Teacher Education, with the assistance of the National Association of School Psychologists, also is involved in the accreditation of advanced degree programs in school psychology. The APA also accredits institutions that provide internships for doctoral students in school, clinical, and counseling psychology.

Psychologists in independent practice or those who offer any type of patient care—including clinical, counseling, and school psychologists—must meet certification or licensing requirements in all States and the District of Columbia. Licensing laws vary by State and by type of position and require licensed or certified psychologists to limit their practice to areas in which they have developed professional competence through training and experience. Clinical and counseling psychologists usually require a doctorate in psychology, completion of an approved internship, and 1 to 2 years of professional experience. In addition, all States require that applicants pass an examination. Most State licensing boards administer a standardized test, and many supplement that with additional oral or essay questions. Most States certify those with a master's degree as school psychologists after completion of an internship. Some States require continuing education for license renewal.

The National Association of School Psychologists (NASP) awards the Nationally Certified School Psychologist (NCSP) designation, which recognizes professional competency in school psychology at a national level, rather than at a State level. Currently, 22 States recognize the NCSP and allow those with the certification to transfer credentials from one State to another without taking a new State certification exam. In those States that recognize the NCSP, the requirements for State licensure and the NCSP often are the same or similar. Requirements for the NCSP include completion of 60 graduate semester hours in school psychology; a 1,200-hour internship, 600 hours of which must be completed in a school setting; and a passing score on the National School Psychology Examination.

The American Board of Professional Psychology (ABPP) recognizes professional achievement by awarding specialty certification, primarily in clinical psychology, clinical neuropsychology, and counseling, forensic, industrial-organizational, and school psychology. Candidates for ABPP certification need a doctorate in psychology, postdoctoral training in their specialty, 5 years of experience, professional endorsements, and a passing grade on an examination.

Aspiring psychologists who are interested in direct patient care must be emotionally stable, mature, and able to deal effectively with people. Sensitivity, compassion, good communication skills, and the ability to lead and inspire others are particularly important qualities for persons wishing to do clinical work and counseling. Research psychologists should be able to do detailed work independently and as part of a team. Patience and perseverance are vital qualities because achieving results from psychological treatment of patients or from research usually takes a long time.

Job Outlook

Overall employment of psychologists is expected to grow faster than the average for all occupations through 2012, due to increased demand for psychological services in schools, hospitals, social service agencies, mental health centers, substance abuse treatment clinics, consulting firms, and private companies. Clinical, counseling, and school psychologists will grow

faster than the average, while industrial-organizational psychologists will have average growth.

Among the specialties in this field, school psychologists may enjoy the best job opportunities. Growing awareness of how students' mental health and behavioral problems, such as bullying, affect learning is increasing demand for school psychologists to offer student counseling and mental health services. Clinical and counseling psychologists will be needed to help people deal with depression and other mental disorders, marriage and family problems, job stress, and addiction. The rise in healthcare costs associated with unhealthy lifestyles, such as smoking, alcoholism, and obesity, has made prevention and treatment more critical. The increase in the number of employee assistance programs, which help workers deal with personal problems, also should spur job growth in clinical and counseling specialties. Industrial-organizational psychologists will be in demand to help to boost worker productivity and retention rates in a wide range of businesses. Industrial-organizational psychologists will help companies deal with issues such as workplace diversity and antidiscrimination policies. Companies also will use psychologists' expertise in survey design, analysis, and research to develop tools for marketing evaluation and statistical analysis.

Demand should be particularly strong for persons holding doctorates from leading universities in applied specialties, such as counseling, health, and school psychology. Psychologists with extensive training in quantitative research methods and computer science may have a competitive edge over applicants without this background.

Master's degree holders in fields other than school or industrial-organizational psychology will face keen competition for jobs, because of the limited number of positions that require only a master's degree. Master's degree holders may find jobs as psychological assistants or counselors, providing mental health services under the direct supervision of a licensed psychologist. Still others may find jobs involving research and data collection and analysis in universities, government, or private companies.

Opportunities directly related to psychology will be limited for bachelor's degree holders. Some may find jobs as assistants in rehabilitation centers, or in other jobs involving data collection and analysis. Those who meet State certification requirements may become high school psychology teachers.

Earnings

Median annual earnings of wage and salary clinical, counseling, and school psychologists in 2002 were \$51,170. The middle 50 percent earned between \$38,560 and \$66,970. The lowest 10 percent earned less than \$30,090, and the highest 10 percent earned more than \$87,060. Median annual earnings in the industries employing the largest numbers of clinical, counseling, and school psychologists in 2002 were as follows:

Offices of other health practitioners	\$59,600
Elementary and secondary schools	54,480
Offices of physicians	51,140
Outpatient care centers	44,010
Individual and family services	37,490

Median annual earnings of wage and salary industrial-organizational psychologists in 2002 were \$63,710. The middle 50 percent earned between \$48,540 and \$81,880. The lowest 10

percent earned less than \$36,620, and the highest 10 percent earned more than \$112,660.

Related Occupations

Psychologists are trained to conduct research and teach, evaluate, counsel, and advise individuals and groups with special needs. Others who do this kind of work include clergy, counselors, physicians and surgeons, social workers, sociologists, and special education teachers.

Sources of Additional Information

For information on careers, educational requirements, financial assistance, and licensing in all fields of psychology, contact:

► American Psychological Association, 750 1st St. NE., Washington, DC 20002. Internet: <http://www.apa.org>

For information on careers, educational requirements, certification, and licensing of school psychologists, contact:

► National Association of School Psychologists, 4340 East West Hwy., Suite 402, Bethesda, MD 20814. Internet: <http://www.nasponline.org>

Information about State licensing requirements is available from:

► Association of State and Provincial Psychology Boards, P.O. Box 241245, Montgomery, AL 36124-1245. Internet: <http://www.asppb.org>

Information about psychology specialty certifications is available from:

► American Board of Professional Psychology, Inc., 514 East Capitol Ave., Jefferson City, MO 65101. Internet: <http://www.abpp.org>